

Lemieux et al.  
Application No.: 10/043,573  
Page 2

PATENT

**Amendments to the Specification:**

Please replace Table 1, beginning on page 8, line 10, with the following amended Table 1.

PATENT

Marker Name	Sequence	SEQ ID NO
1-85/5B5/86-1	AGCAAGCTTACATGCGTGGA [G/T/AA] GAGAGTCCTCGAGATCAACC	30
2-85/5B12/N3-1	CCTTGATCTCTCAAGTAATC [A/G] TCTCACCGGAAGATCCCTGA	31
3-85/5C3/86-2	ACCATCCATTAAACTGTATC [A/G] TCGCAATCTAACCAAAAAGTT	32
4-85/5E1/86-1	TAAAGCAAAGAGAGTCTTAC [C/A] GTCTGCTGCATGATATACCC	33
5-85/5E1/86-2	CTACTGATAGTGAACCACCC [A/C] ATCCCCAAATTTAAAGCAAA	34
6-85/6A11/86	ATCCTATTGGTAGTAACACA [G/A] ATTGAGTTAATGTTGCAGGG	35
7-N1/6A11/N2	AGGCAAAAGCGGTAGTTGCAA [G/A] ACTGCTTCTCACGAGGTAAT	36
8-N1/6A9/N2-1	CCAGCTTCAATGTCTGCATG [C/A] TTGTGTCGATGCCAAAAGTTC	37
9-N1/6A9/N2-2	AAAGTTCAATTACGATGATCT [A/G] ACCCTGCAGTCATCCATGGA	38
10-85/6A12/86	CTTCCCCCCTCAATACCTC [T/G] TTCAAAAAGTGAAAAGTGCAG	39
11-N1/6D1/N2-1	ATTTTGTTTTGTCTTGTG [G/C] GGTGAGGTCAGAACAAAAGTT	40
12-N1/6H5/N2	AAACCAGAGCCACCTCCTTA [C/] CCACCTCATCGTTTCCCTTTC	41
13-86/6F11/N2-2	GATTTTCGACCGCAGTCTCAC [G/T] GAGGATGAGTATATCGCTTT	42
14-N1/6F11/N2	TAGGACAGGCAAAACAATCTA [C/A] GCGGTCAAAATCCGATTTTCG	43
16-N1/8B5/N2	ACTCAAAAAAACGATACCTC [G/C] GCCGTCTCTCGCCGTCTCGC	44
17-N1/8D4/N2-1	CAGGAGACAGTTACAGTCCC [/A] CAGAGTCGCAAGGATCTCGAA	45
18-85/8D4/86-2	CTGATCTTGAAGGAGAGACC [A/G] CCACAAGGTTCCATCCTATG	46
19-85/8H11/86	AGTGCgAGGCTCAGTTGGAT [G/T] ATTAGGGTGTCAAGTAAATCA	47
20-85/10B8/86	NAGGTCCATGATGATGACAA [T/A] AAAGGTATTCACATGTCAA	48
21-N2/10B8/N3-2	ACATCCAACTTTTCTCCAGT [T/C] CTTTATTTCTATCCTGATTG	49
21-N2/10B8/N3-2	AGATCGAACTTTTCTCGAGT [T/C] CTTTATTTCTATGCTGATTTG	50
22-N2/10B8/N3-1	AAGGTATTCCATTGGTATAC [A/C] TCCAACTTTTCTCCAGTTCT	5051

PATENT

23-85/10B9/86	GACCTTCTTGGGAAAGAAAG [T/C] TGTAACCGCGTCGAGATTCCG	<u>5152</u>
24-10C8/N2	ATAGAAACCGCCGATGCTCA [A] GGACACGCCACCGTCTTCGT	<u>5253</u>
25-10C8/N2	CACCTTCTTCGTGGCTAAAT [T] CTTCCGGCCGAGCCGGTCTCA	<u>5354</u>
26-10D2/N1	GTTATCATCAGTACCGGTAT [T] AACCCCAAGGCTAATTCTTA	<u>5455</u>
27-85/10D2	TTGGGTATCTACGGAATGAT [C] ATCGCTGTTATCATCAGTAC	<u>5556</u>
28-N1/10E12/N2-1	GGAATTCAATACTCGCCAAC [G/T] TCTTCAATTGCTGTCGTCGGC	<u>5657</u>
29-N1/10E12/N2-2	TCCTTACGCCCTTCAAGCGCA [C/G] CGGCTGGCTCATGGGTGTCC	<u>5758</u>
30-N1/10F4/N2	TGTATCTATGCGGTGGCTGC [G/C] GTCTCCGTTCCGGCCAGTAC	<u>5859</u>
31-10F4/N2	GCGCCAGTACCGCCGGTTAC [A] ATCTcACTGCCTTCACGTCC	<u>5960</u>
32-85/10F4/N2	GCGCCAGTACCGCCGGTTAC [G/A] ATCTTAATGCCCTTCACGTTC	<u>6061</u>
33-85/10F9/N1-2	AACCTTGAATTCACAACTT [G/C] AGAAACTTCGAIGTGTGCC	<u>6162</u>
34-85/10F9/86	CGGTACTGCGAAAGCTGGAG [C/G] ATCAACTTGGAAATCCACAA	<u>6263</u>
35-86/10F12	AAAAGTGCTATTGTTTCAGGT [G] GATGCTGCTCCGTTCAAGCA	<u>6364</u>
36-85/10H6/86	GTCAAAAAGCCACGGATTCAA [G/A] AACGTGCTCTTCTTGCCT	<u>6465</u>
38-85/10F12/86	AAACCAGGTCCTTGATGTG [T/] GTCTACAACGCTTCCAACAA	<u>6566</u>
39-85/11B7/86	AANACCCTGAGCTCATGCCT [C/T] TGACCCATGTTCTTGCCACC	<u>6667</u>
40-85/11C4/86	TTTGGGACCGTTGGAGTTGC [A/G] TCTGCGGCTATGACGGTGA	<u>6768</u>
41-85/11D4/86-2	AATCTTTGCCATTGCTGTCA [A/G] TATCTTCGTCAGCTTCAGCT	<u>6869</u>
43-N2/11D11/N3	GACAAACGCTGGTGTATTGC [C/T] GAAATGGCTGGAATGAGCCA	<u>6970</u>
44-86/11D11/N3	GCTGCTCTAGGATGCTCAG [C/T] ACCATCGCCACCGGTTTGGC	<u>7071</u>
45-85/11D11/86	ATGCTCAGCACCATCGCCAC [T/C] GGTTTGGGATTTGATGCTTA	<u>7172</u>
46-N2/11E3/N8a	GAGAAAGTGCTTGTGGAGAT [C/T] TACAAGTCCATACTAGTGGC	<u>7273</u>
47-86/11E3/N2a	AATGCTTGTGGAGATtTACA [G/A] GTCCATACTGATGGCGCAGG	<u>7374</u>

PATENT

48-86/11E3/N2b	AATGCTTGTGGAGATcTACA [G/A] GTCCATACTGATGGCGCAGG	<u>7475</u>
49-85/11F12/86	AATGATTGGTTTGAGAAGCA [T/A] ACAGCTGGTACGCTTGATAT	<u>7576</u>
50-85/11F7/86	GATAGGGCGAAGAGAGGGAA [G/A] AGTCCTGAGAGGAAAGAGAT	<u>7677</u>
51-85/11H2/86-2	CTCTCTCTCCACAAAAGACAC [A/C] GCTTTCTCCATGACCTTCCGG	<u>7778</u>
52-85/11H5/86-2	TCTCTGACGTCATGAAAGCT [C/A] ATGGCAAAATTGCTGATGGA	<u>7879</u>
53-85/11H6/86-1a	GTTATCGATCGCGTGGTCCG [T/C] GAAACCCCAAAAATaCACCTTT	<u>7980</u>
54-85/11H6/86-1b	GTTATCGATCGCGTGGTCCG [T/C] GAAACCCCAAAAATtCACCTTT	<u>8081</u>
55-85/12B6/N3	CGTCAGCCTTCTTCCGCCGC [A/C] GTCGTCCTCCGCAACCGTGC	<u>8182</u>
56-86/12B6/85a	TGTCTCTTCCGTCAGCCTTC [C/T] TCCGCCGCAGTCGTCCTCCG	<u>8283</u>
57-86/12B6/85b	TGTCTCTTCCGTCAGCCTTC [C/T] TCCGCCGCCGTCGTCCTCCG	<u>8384</u>
58-86/12B11/85	TCAGGTTTACCTCTATATAT [T/] ATATTTTCATGGTATGAAGGT	<u>8485</u>
59-n1/12B11/N2-2	TATCCTGCAAAATTGACATTT [T/C] CCTTCAGGTTCTAGAAGCTG	<u>8586</u>
60-85/12C2/86	CGAGAACAGAAAGAGAAGAGA [C/] TGGAAACACGTCGGACAGTAC	<u>8687</u>
62-12C11/N2	ACGGGTCCTAGCGCCCATGGC [T] ATTTTCCCTCACCGTTTCTGG	<u>8788</u>
63-N1/12D10	TTGGGCTTTCGGTGGTATGA [T] CTTGTCCTCGTCTATTGCA	<u>8889</u>
65-85/12F4/86-1	TCCTTGATTCCCTTAATAATC [A/T] TTGGCTGGGGGTCTTTCTAA	<u>8990</u>
66-12G5/N1	GCTTGAATAACGATGTCTAC [T] CTGCCCTCGCGTACGGCGGA	<u>9091</u>
67-85/12G8	CTAAAAAGATCGACGAGTGT [C] CCTTACTACGCTCCCATCTAT	<u>9192</u>
68-12G9/N1-1	AGGTGGGTTTAGCGTGGCAT [C] CGATCCATTGGATGGATCCA	<u>9293</u>
69-85/12G9/	NGTGGGTTTACCGTATCATT [T] GATCCATTGGATGGATCGAG	<u>9394</u>
70-12B11/N2-1	GCGGATCCCTATATTGGGTCT [T] GATGGATTGTTTCTATCCCG	<u>9495</u>

PATENT

71- /12B11/N2-2	TATCCTGCAAAATTGACATTT [C] CCTTCAGGTTCTAGAAAGCTG	9596
72-N1/12E10	TACCACGGTCGTACTGGTCG [A] TGTCTGGAACGTCAACCAAGC	9697
73-N1/13A3/N2a	CTGTCTCAGTTTGTGGATC [C/G] AAATCgAAATCGAAAGCGTAC	9798
74-N1/13A3/N2b	CTGTCTCAGTTTGTGGATC [C/G] AAATCaAAATCGAAAGCGTAC	9899
75-13E8/N2	ACACTGTTGGAGGACGTGAA [G] AAGATATTCAAGACAAACATC	99400
76-N1/13F6/N2-2	TCTTTTCGTATCTTGTGAGT [C/T] GTTACGCCCTGTCAACACCCG	100401
77-13F8/N2-1	GGAAACCCTAGGGAGCCCA [G] CTCCTTATGCTAAGCGCGT	101402
78-13F8/N2	GATCATAGTATCCGCCGAA [C] CCTAGGGAGCCACAGCTCC	102403
79-85/14B5/86	TTCGGCGGTCGATCCGGC [A/G] GAAGACATTGTCAGGTGANN	103404
80-N1/14C2/N2	GCACCAACATTGTAAACCTA [T/G] AGCTTCTTCCTCAGCCACCT	104405
81-85/14C2/86-1	GCTGCCACATAGTGAACCTA [T/A] AGCTTCTTCCTCAGCCACCT	105406
82-N2/14C2/85-2	GCACCAACATTGTGAACCTA [G/A] AGCTTCTTCCTCAGCCACCT	106407
83-85/14C2/86-2	AGTACATAGCTATTGACTAA [C/G] TTAAGTTCCTTGTAATTGTTG	107408
84-N2/14C2/85-1	CCTCTATCCGCCCATGGTTGC [A/T] CCAACATTGTGAACCTAGAG	108409
85-85/14E2/86-2	TTGACCCCTCGGCAAGCCACC [G/T] GTCAAGCCATGCTGCAGCCT	109410
86-85/14E2/86-1	AGGCTGCCCTCTCCCAATTC [A/C] AAAGCCAACCTCCTAAACCAA	110411
87-85/14E8/86	AAACATGGAAGGCCTGATA [/G] TCACCGTCAAGCTCACCGTC	111412
88-85/14E12/86	CAACCTGAAAAATTGTTTTA [C/A] CAACGGCCCCGCTTTCTCCA	112413
89-14H10/86	AAGGCCAACCAACGACATTAC [C] TCCATCGTTAGCAACGGAGG	113414
90-85/14H10/86	TCACCGGCTTGAAAGTCTTCC [G/T] CTGCATTCCCAGTCAACCCGC	114415
91-85/15A6/86	ACTCAGCTTTCTTATGCCCTC [G/] ACTTGCGACACACGAATCCA	115416

PATENT

92-85/15C4/86	TGCGGCTAACATCTCTGGTG [G/T] TCACCTTAACCCAGCCGTAN	<u>116</u> <u>117</u>
93-85/15E5/86-1	CGAGGATCACTTCTCTCTGT [G/T] CAAGAAGAAAGTTCCGGCAAGG	<u>117</u> <u>118</u>
94-N1/15E5/N2-1	CTGTtCAAGAAGAAAGTTCCG [C/T] AAGGTCTACGCTTCCCGCGA	<u>118</u> <u>119</u>
95-N1/15E5/N2-2	CCCTCTGCTCGTCACGGCGT [T/A] ACGCAGTTCTCGGATCTGAC	<u>119</u> <u>120</u>
96-86/15E5/N2	CCCGCGAGGAGCAGCTAC [A/T] GATTCTCCGTTTTCAAATCC	<u>120</u> <u>121</u>
97-15E9/86	TCCACTCGCCGGGAAGAAAC [T] CGACAAACCGTTGTCTACTT	<u>121</u> <u>122</u>
98-N2/15E9	ATGGCTCGGACGGGTCTCC [G] GTAAACCTCGGAGAGCAGAT	<u>122</u> <u>123</u>
99-N2/15E9/86	GCCGACTCTCGAAGCTTCTT [A/] ACTCCACTCGCCGGGAAGAA	<u>123</u> <u>124</u>
100-85/15E9/86-1	GAATCTAGGAGAGCAGATCT [T/G] CCTCTCTATCTTCAATGTTT	<u>124</u> <u>125</u>
101-85/15E9/86-2	TCCACTCGCCGGGAAGAAAC [C/T] CGACAAACCGTTGTCTACAT	<u>125</u> <u>126</u>
102-N1/15E9/N2-1	GTCATGAAGATATTCACTAC [A/G] CCGACTCTCGAAGCTTCTTA	<u>126</u> <u>127</u>
103-85/15F1/86	GCAGGTAATAATTCTACAGAC [C/A] TTCCCTTTTCATTGTAGTTA	<u>127</u> <u>128</u>
104-85/15F5/86	TCTCTCCGCCGCGCAAGAA [G/A] AAATCGACAGCGCGCTCT	<u>128</u>
105-85/15F10/86	GTGCCCTAAAGATACCCTCA [A/G] GCTTGGTGTCTGCGCTAATG	<u>129</u>
106-N2/15G1	TTCTTTCCACAGGTGAAACT [T] GCTAACTTCCCTTCCAAAGTA	<u>130</u>
107-N1/15H7/N2	TATGTATCAGGACAAATGTGT [GA/TT] GTGACTGTGTTGCATCCAT	<u>131</u>
108-N1/16A1/N2-1	GCTAAGCTACGCAACTGCCA [C/T] CAATCAGGGCAAGCTAAAGG	<u>132</u>
109-85/16A5/86	TATACACTCTTTAAAGCGT [G/C] TGTGTGTACCCATCTCTCTT	<u>133</u>
110-N1/16B6/N2	ATGGCTGCGTATTGGCTGTC [C/T] AAGGCTGGATCTTGGTCCCA	<u>134</u>
111-85/16B6/N1	GGATCCATCTCAACTATGGT [A/C] GTATTATCGTTGAGGCTAGG	<u>135</u>
112-85/16B7/86	GTATGTGATTCCGAAGAGAA [T/] CAAACTAAGTCCCAGAGAAAG	<u>136</u>
113-N1/16D6/N2	GCTAAGGTAGTTGGAGGAGC [CAA/GTG] CCACAGCCACGCGACTAAGG	<u>137</u>
114-85/16D10/86	CTCAACGTAGCAAGTAATAA [T/G] ATACTGTCTATTATGGTTA	<u>138</u>

PATENT

115-N1/16E9/N2	AGACTTCCCCATTCTCTTC [T/A] CCATCCACCGTCGAAACCCA	139
116-85/16H3/86-1	ACTTCGAAACTGTAAACCTA [A/T] ACTTTAAGAGTTTAGAGCTA	140
117-85/16H3/86-2	CACCATCGGAGAAAGAGGTA [C/T] TTCGAAACTGTAAACCTAAA	141
118-85/17A5/86	CTAAGGCGTCTCCTGAAGAA [A/G] TACAGAGAGTCGAAGAAGAT	142
119-85/17C7/86	CCGCGGACGACGCTTCTTC [C/A] TCTGCTCCACCGGAGCGCC	143
120-85/17F7/86	GAGGAGTAGTCTCCATGGCC [G/] AAGAAGAGCGTCGGAGACCTG	144
121-85/17G12/86	GAAGTTAGGGCTTCTAAGAT [C/T] AAGTTCGGCAAGGCTTTAAC	145
122-85/18A2/86	TCAAAACTAATATTCTTTT [G/C] TTGATTGGTAATAAACAGGT	146
123-85/18A11/86	TTCCAGTGAAAAGGCATTGT [T/G] CTCCAAAATCTCGCTCTGCG	147
124-85/18F5/86	AAGCAGCTCTGACTTGAATG [C/A] GAGAGGTTAATCAGACTGTG	148
125-85/18H10/86-3	TAGATTGAAGCAATCAAGAA [G/A] ATCTCAGACTTCATCACCCA	149
126-85/19B3/86	GCATCCAACTCCAAGGATGA [/C] CCTGCCAAGGTGCTGCTAACT	150
127-85/19C8/86	GAGCTCAGGGATGGTGGATC [A/T] GACTACCTTGGAAGGGGTGT	151
128-N1/19F4/N2	TGGGTTAGTCGAAAATAGGT [A/T] AAATGCTTTGAGTATGTGA	152
129-N1/19H1/N2	TACGGCAGCACGGACTTGC [G/A] ACGCAAGCAATCGAGCTTTT	153
130-85/20B4/86-1	GAAGCCCATGGTACGGAGCG [G/A] GAGAGAGTCAAGTACTTGGG	154
131-N1/20B12/N2	AACGGGTCACTGCTAAATCA [T/A] AAGGATCACAAGGCTGGGAC	155
132-85/20C12/86	CTAGCCTACTTTGGGAAAAG [/T] TTCGTTATTGTTTGTGTGG	156
133-85/20D2/86	GACTTCAAGGACTTCGCCGG [A/C] AAATGCTCCGACGCTGTCAA	157
134-85/20D3/86-2	GAGGAGGGCTACATGCAGCT [G/A] AAGAGGCTGAGGGGGCTAAA	158
135-85/20D6/86-4	GATGTTCAACCTATGAAGAA [G/C] AAACACCGAGGACCAACGAG	159
136-85/20D6/86-5	CCATTAGTGAGGGAGCATGT [T/A] CCTGTACATTTGATGATTG	160

PATENT

137-85/20D6/86-8	AAACACATCGCCAAAGATCC [CG/AA] ACACTCGAGAAAGAGTGGAG	161
138-N1/20D8/N2	CTCATAGGCGATCTGGAGTA [T/G] GCAAATCGAATCTCCTCTCC	162
139-N1/20E1/N2	TGCACGCCCTCACTTGTTCCT [T/A] CCAATCTGACATCAAGGATT	163
140-N1/20F1/N2-1	NGTGTTTTGGAGTGAAAGC [A/T] ACAAATGGAGATACCTTTT	164
141-N1/BoC-a2/N3-2	CCCGAGCCATTAGGACAAAGA [T/C] GACTTGCCGTTTGACCCAAAC	165
142-N1/BOC-A2/N3-1	CCCATCTCATCCTTTCTTGA [A/G] CCGTTGAATCAAGCTCCTGG	166
143-N1/BoC-a2/N3-3	TACATTCTCATTTGGTTGGTT [C/A] TTGGGAAATAAAGTACCAAC	167
144-86/SC3	GCACGCGCTAGAGTTGTTGC [C] AGAAGGAATGAACAAATCTGA	168
145-N3/SC3/N4-1	CTTGAGACCTATAGTCCTGT [A/T] GTTCGGTCCGCCACAGTTCG	169
146-N3/SC3/N5-1	CACAGTTCGTACAGTTCTTC [A/C] CATTGCCACTGTTATGCACT	170
147-N1/SC3/N3-1	GAAGGCGTCCACTATCTTGA [A/G] ACCTATAGTCCTGTGTTCG	171
148-86/SC3/N4-1	TCCCGGAAATCTTGCTGAAA [A/C] CGTTTACCTGCGACAACCCAG	172
149-B11/N5-1	ATGTCCTTCAAAGTGCTCTGT [T] GCAACGCACGTC CGAACAAG	173